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**Scalzi**

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(54) **UTILIZATION OF FERRIC AMMONIUM CITRATE FOR IN SITU REMEDIATION OF CHLORINATED SOLVENTS**

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See application file for complete search history.

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(57) **ABSTRACT**

Accelerated dechlorination of soil and water contaminated with chlorinated solvents in situ is achieved by delivering ferric ammonium citrate into the soils and/or water. The induction of ferric ammonium citrate into sulfate-rich reducing conditions initiates a combined abiotic and biotic mechanism for the dechlorination of subsurface contaminants. Initial and rapid removal of chlorinated solvents is achieved by way of reductive transformation, a mechanism utilizing the creation of an iron-bound soil mineral (pyrite) followed by stimulating conditions for enhanced biological natural attenuation.

**24 Claims, No Drawings**